**COMP 303 JAVA EE PROGRAMMING**

**FALL 2020**

1. **RULES**

During the practical test, all students are expected to follow the rules outlined below:

* 1. The practical test consists of developing a Spring Boot App in an Eclipse IDE.
  2. In the practical test, you are allowed to use any materials including slides, books, assignments/programs created by you or the solutions provided by the professor, Spring Documentation, and Internet.
  3. Computers / Laptops must be used in the practical test.
  4. Code will be submitted in e-centennial Dropbox and check with the professor that the submission was successful before you leave the exam.
  5. Students are not allowed to use someone else’s solutions – only solutions created by them or the professor.
  6. This lab test must be completed individually by all the students.
  7. **Students have to submit screenshots of their solutions, if professor can not run the solution on their computer, 15 points will be deducted if there are no screenshots from your environment, we will assume it is not runnable.**
  8. You should complete this lab test within given time duration and no extra time will be given. You will have 24 hours to submit your test.

1. **INSTRUCTIONS:**

**1.** You should create a database named “**BookData**” with a following table “**Book**” and the field names given below. You should use appropriate data types:

* + - * + bookId
        + bookTitle
        + isbn
        + author
        + releaseYear
        + language
        + price

**2.** Create a new **Spring Boot Project** named “**YourName\_FinalTest**” with the following classes:

* **Entity class** to map the book table and the fields – use **JPA** annotations to do define a class members and validations:
  + Entity class
  + Specify table name
  + Book Id as a primary key
  + Release year between 2000 and 2019
* **Controller class** to map view files - this class should handle the followings:
  + Show all the books available in book table
  + Add new books into book table
  + Delete a book from the book list
  + Use can use Repository or Service class(s)

1. Configure the **application.properties** file.

* Define view files as html file (like index.html) to perform the CRUD functionality.

# RUBRICS

|  |  |
| --- | --- |
| Creating spring boot to implement JPA | 50% |
| Designing view with user friendly UI & providing screenshots | 30% |
| Configuration of application.properties and validations | 10% |
| Handling and manipulating MySQL database and tables | 10% |
| **Total** | **100%** |

**Negative points:**

Negative or minus point will be given when you ignore the instructions stated in the exam paper and fail to debug the spring boot app (syntax errors, runtime errors in browser or URL mapping errors or MySQL database connections or SQL errors).

# ACADEMIC INTEGRITY

All students must follow the academic honesty policies regarding Plagiarism and cheating on assignments, Quizzes or Tests. Centennial college's Academic Policy will be strictly enforced. To support academic honesty at Centennial College, all academic work submitted by students may be reviewed for authenticity and originality, with utilizing software tools.

**Any practices are identified in student’s solutions, the action will be taken based on the academic honesty policy.**